

CLAIMS

I claim:

1. A post structure, comprising:
 - a base having a socket with an opening disposed in a wall of the socket;
 - a column having an end configured for insertion into the socket and an aperture configured to align with the opening in the socket;
 - a latch disposed in the end of the column; and
 - a biasing element configured to displace the latch through the aperture and into engagement with the column in the socket to secure the column in the socket.
2. The post structure of claim 1, wherein the socket comprises a first opening and a second opening, and the column comprises a first aperture and a second aperture, said first and second openings in the socket being configured to align with the first and second apertures in the column when the end of the column is inserted into the socket.
3. The post structure of claim 2, wherein the biasing element comprises an outwardly biased torsion spring in said column, said torsion spring having a first end and a second end, and the latch comprises a first pin extending from the first end of the torsion spring, and a second pin extending from the second end of the torsion spring, said first pin being configured to engage with the first opening and first aperture, and said second pin being configured to engage with the second opening and second aperture, said pins being urged into engagement with said openings and apertures under the bias of the torsion spring to secure the column in the socket.
4. The post structure of claim 1, wherein the biasing element comprises an outwardly-biased compression spring having a first end and a second end, and wherein the latch comprises at least one piston circumferentially disposed around one of the ends of the compression spring, said piston being

configured to engage with the opening in the socket and the aperture in the column, said piston being urged into engagement with said opening and said aperture under the outward bias of the compression spring to secure the column in the socket.

5. The post structure of claim 4 comprising a cylindrical housing disposed in the interior of the column, said housing forming a bore adapted to receive said piston and permit slidable displacement of said piston in said housing, wherein said housing is slidably adjustable within the interior of the column to permit alignment of the bore with the opening and aperture in the socket and column, respectively.
6. The post structure of claim 5, comprising a guide peg on the piston, said guide peg extending transversely from the longitudinal axis of the compression spring, said housing comprising a guide slot adapted to receive the guide peg on the piston, wherein the guide slot comprises a recess adapted to releasably retain the piston inwardly and out of engagement with the opening and aperture.
7. The post structure of claim 6, wherein the guide slot comprises an inner recess, an outer recess and an intermediate recess disposed between said inner and outer recesses, said inner recess, intermediate recess, and outer recess being adapted to releasably retain the guide peg in a first position, second position, and third position, respectively, in which said piston is disengaged from the column aperture and socket opening in the first position, engaged with the column aperture and disengaged from the socket opening in the second position, and engaged with the column aperture and socket opening in the third position.
8. A post and trim assembly, comprising:

a base having a socket with an opening disposed in a wall of the socket;

a column having an end configured for insertion into the socket and an aperture configured to align with the opening in the socket;

a latch disposed in the lower end of the column;

a biasing element configured to displace the latch through the aperture and into engagement with the opening in the socket to secure the column in the socket; and

a frame apparatus comprising a plurality of interlocking pieces configured for connection around the base.

9. The post and trim assembly of claim 8, wherein the frame apparatus comprises a plurality of interlocking identically configured pieces, each piece having a first extension and a second extension extending perpendicularly from the first extension, the first extension of each piece having an internal channel adapted to receive the second extension of another piece in a telescoping connection, said internal channel in the first extension having a plurality of ratchet teeth configured to mate with a plurality of ratchet teeth on the second extension, wherein said ratchet teeth in the first and second extensions are configured to slidably engage to allow the second extension to slide relative to the first extension into the channel, and further configured to lockingly engage to substantially prevent reverse sliding of the second extension relative to the first extension, such that the second extension is locked in engagement with the first extension.
10. A frame apparatus comprising a plurality of interlocking identically configured pieces, each piece having a first extension and a second extension extending perpendicularly from the first extension, the first extension of each piece having an internal channel adapted to receive the second extension of another piece in a telescoping connection, said internal channel in the first extension having a plurality of ratchet teeth configured to mate with a plurality of ratchet teeth on the second extension, wherein said ratchet teeth in the first and second extensions are configured to slidably engage to allow the second extension to slide relative to the first extension into the channel, and further configured to lockingly engage to substantially prevent reverse sliding of the second extension relative to the first extension, such that the second

extension is locked in engagement with the first extension.

11. A frame apparatus comprising a plurality of interlocking identically configured pieces, each piece having a first extension and a second extension extending perpendicularly from the first extension, the first extension of each piece having an internal channel adapted to receive the second extension of another piece in a telescoping connection, said first extension of each piece further comprising one or more breakable joints that are configured to be broken apart to change the length of the first section to a desired length.
12. The frame apparatus of claim 11, comprising an indicia adjacent to each breakable joint, said indicia being indicative of a finished dimension when the adjacent breakable joint is broken.
13. A post structure for supporting a hollow tubular shell, comprising:
 - a base forming a socket;
 - a frame configured for insertion into the hollow shell, said frame comprising a cylindrical hub and a plurality of fins extending radially outwardly from the hub, said fins forming an outer frame perimeter that conforms with the interior of the hollow shell; and
 - a cylindrical column configured for insertion through the bore in the cylindrical hub, said column having an end configured for insertion into the socket to connect the column and the frame with the base.
14. The post structure of claim 13, comprising a plurality of inner ribs extending longitudinally along the inner wall of the bore, said inner ribs being configured to frictionally engage the exterior of the cylindrical column when the column is inserted through the bore.
15. The post structure of claim 13, comprising a plurality of exterior ribs extending outwardly from the fins, said exterior ribs configured to frictionally engage the interior of the hollow shell when the frame is inserted into the shell.